CLAIMS:

1. A method for determining a position of an area of an object within said object, wherein an image of said area of said object is contained within a field of view of a microscope, and wherein image data representing a low magnification image of the complete object is available, the method comprising the steps of:

acquiring high magnification image data representing an image of the field of view of the microscope;

processing the high magnification image data to reduce the resolution thereof;

comparing the processed high magnification image data with portions of the low magnification image data; and,

determining said position based on the results of said comparison.

2. A method as claimed in claim 1, in which the comparison determines a percentage of identical data in each compared portion of the low magnification image data and the processed high magnification image data

3. A method as claimed in claim 1, in which a position is determined if the determined percentage of identical data for at least one portion of the low magnification image data exceeds a predetermined threshold.

4. A method as claimed in claim 3, in which the step of determining said position based on the results of said comparison comprises determining the position as the position of the, or one of the, at least one portion of the low magnification image data.

5. A method as claimed in claim 4, in which, if the percentage of identical data for more than one portion of the low magnification image data exceeds the predetermined threshold, the position is determined as the position of the portion with the highest percentage of identical data.

5

6. A method as claimed in claim 1, in which the processing comprises reducing the resolution by a predetermined amount.

7. A method as claimed in claim 6, in which the predetermined amount is a factor determined by calibration of an apparatus from which the low magnification image data is acquired, and calibration of the microscope.

8. A method as claimed in claim 1, further comprising displaying an image of the complete object and of the field of view of the microscope on a display screen, and highlighting the area of the image of the complete object corresponding to the determined position.

9. A method as claimed in claim 1, further comprising, initially acquiring said low magnification image data from a high resolution image data source.

20

10. A method as claimed in claim 9, wherein the image data source is one of a scanner, digital photocopier and a high resolution digital camera.

11. One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

acquiring high magnification image data representing an image of the field of view of the microscope;

processing the high magnification image data to reduce the resolution thereof;

5 comparing the processed high magnification image data with portions of the low magnification image data; and,

determining said position based on the results of said comparison.

12. On a computer readable medium, a computer program for determining a 10 position of an area of an object within said object, wherein the image said area of said object is contained within a field of view of a microscope, and wherein image data representing a low magnification image of the complete object is available; the program comprising:

program means for acquiring high magnification image data representing 15 an image of the field of view of the microscope;

program means for processing the high magnification image data to reduce the resolution thereof;

program means for comparing the processed high magnification image data with portions of the low magnification image data, and,

20 program means for determining said position based on the results of said comparison.